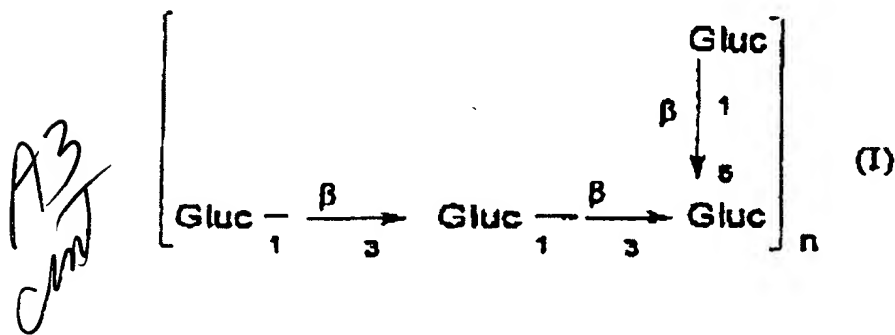


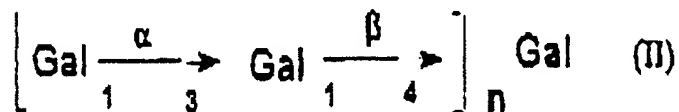
14. (New) A medicine comprising as an active principle an effective amount of at least one oligosaccharide capable of modifying apoptosis dysfunctions and which satisfies the formula:



in which n represents an integer from 1 to 50, and in which the number of branches is from 0 to 3 per repeat unit.

15. (New) The medicine according to claim 14, wherein n in formula (I) represents an integer from 5 to 10.

16. (New) A medicine comprising as an active principle an effective amount of at least one repeat disaccharide which is capable of modifying apoptosis dysfunctions and which satisfies the formula:




in which n represents an integer from 1 to 50.

17. (New) The medicine according to claim 16, wherein n in formula (II) represents an integer from 1 to 20.

18. (New) The medicine according to claim 16, wherein at least some of the repeat disaccharides of formula (II) comprise one or more sulfate groups.

19. (New) A medicine comprising as an active principle an effective amount of a product which is capable of partially inhibiting apoptosis and which is obtained by hydrolysis from sodium iota-carrageenane, the product comprising a mixture of oligo-iota-carrageenans named I<sub>9</sub>, which has a total saccharide content of 62%, and which has a distribution profile by size estimated by electrophoresis on polyacrylamide gel of:



iota-neocarratetraose	(DP 2)	8-12%
iota-neocarrahexaose	(DP 3)	23-27%
iota-neocarraoctaose	(DP 4)	18-22%
iota-neocarradecaose	(DP 5)	13-17%
iota-neocarradodecaose	(DP 6)	8-12%
oligo-iota-carrageenan	(DP 7)	3-7%
oligo-iota-carrageenans consisting of 8 to 15 repeat disaccharides	(DP 8-15)	13-17%.

20. (New) A medicine comprising as an active principle an effective amount of a product capable of activating apoptosis dysfunction which is obtained by acidic aqueous extraction from brown algae, the product comprising a mixture of oligo-(1→3)-β-glucans named L<sub>11</sub> and comprising from 1 to 50 saccharide units, the product having the NMR spectrum shown in Figure 1.

21. (New) The medicine according to claim 20, wherein the brown algae is named *Laminaria digitata*.

22. (New) The medicine according to claim 20, wherein the mixture of oligo-(1→3) β glucans comprises from 20 to 30 saccharide units.

23. (New) A medicine comprising as an active principle an effective amount of a product capable of activating apoptosis dysfunctions and comprising fraction DP7 of a product named I<sub>9</sub>.

24. (New) A method for treating apoptosis dysfunctions comprising administering to a patient at least one oligosaccharide substance selected from the group consisting of:

- A3  
mm
- oligosaccharides which are derived, by enzymatic or chemical process, from polymers comprising (1→3)- $\beta$ -glucans which optionally comprise (1→6)-  $\beta$ - branching, and
  - oligosaccharides which are derived, by enzymatic or chemical process, from sulfated galactans.

25. (New) The method according to claim 24, wherein the oligosaccharide substances comprise on at least some of their individual units, at least one substituent of the group consisting of sulfate, methyl and acetyl groups.

26. (New) The method according to claim 24 wherein the sulphated galactans are carrageenans, agars or porphyrans.

27. (New) A method for treating apoptosis comprising administering to a patient a product selected from the group consisting of oligosaccharides of formula (I) and oligosaccharides of formula (II).

28. (New) A method for treating apoptosis comprising administering to a patient a product selected from the group consisting of products referred to as I<sub>9</sub> and L<sub>11</sub> and a product constituting fraction DP 7 of product I<sub>9</sub>.